

CLAIMS

1. A method of enabling online bill payment, the method including the steps of:
providing a potential purchaser with a form containing information relating to a
5 bill paying transaction, the form including coded data indicative of an identity of the
form and of at least one reference point of the form;
receiving, in a computer system, indicating data from a sensing device
regarding the identity of the form and a position of the sensing device relative to the
form, the sensing device, when placed in an operative position relative to the form,
10 sensing the indicating data using at least some of the coded data; and
identifying, in the computer system and from the indicating data, at least one
parameter relating to the bill paying transaction.
2. The method of claim 1 in which said at least one parameter relating to the bill
15 paying transaction is associated with at least one zone of the form and in which the
method includes identifying, in the computer system and from the zone relative to which
the sensing device is located, said at least one parameter.
3. The method of claim 2 which includes:
20 receiving, in the computer system, data regarding movement of the sensing
device relative to the form, the sensing device sensing its movement relative to the form
using at least some of the coded data; and
identifying, in the computer system and from said movement being at least
partially within said at least one zone, said at least one parameter of the bill paying
25 transaction.
4. A method of enabling online bill paying, the method including the steps of:
providing a potential purchaser with a form containing information relating to a

receiving, in a computer system, data from a sensing device regarding said at least one parameter and regarding movement of the sensing device relative to the form, the sensing device, when moved relative to the form, sensing the data regarding said at least one parameter using at least some of the coded data and generating the data regarding its own movement relative to the form; and

10

providing a potential purchaser with a form containing information relating to a bill paying transaction, the form including coded data indicative of an identity of the form;

identifying, in the computer system and from the data regarding the identity of
20 the potential purchaser and the identity of the form, a bill paying transaction.

7. The method of claim 6 which includes receiving, in the computer system, data from the sensing device regarding movement of the sensing device relative to the form,

8. The method of any one of claims 2, 4 or 6 in which the parameter is an action parameter of the bill paying transaction, the method including effecting, in the computer system, an operation in respect of the action parameter.

requesting information relating to a bill, initiating bill payment, resetting the form, electronically forwarding a bill, paying a bill, printing a bill, canceling a bill payment, listing due bills, listing or adding billers, listing, adding or removing payment methods and listing or removing failed bills.

10. The method of any one of claims 3, 4 or 7 in which the parameter is an option
15 parameter of the bill paying transaction, the method including identifying, in the
computer system, that the potential purchaser has entered a hand-drawn mark by means
of the sensing device and effecting, in the computer system, an operation associated with
the option parameter.

a payment method, card type, bill payment line, autopay option, and account type.

NPA075US

13. The method of claim 12 which includes converting, in the computer system, the handwritten text data to computer text.

5 14. The method of claim 13 in which the text parameter is associated with at least one of:

payment limit, account name, account number, cardholder name, card expiry date, autopay limit, payment amount and payment date.

10 15. The method of any one of claims 3, 4 or 7 in which the parameter is an authorization parameter of the bill paying transaction, the method including identifying, in the computer system, that a payer has entered a handwritten signature by means of the sensing device and effecting, in the computer system, an operation associated with the authorization parameter.

15

16. The method of claim 15 which includes verifying, in the computer system, that the signature is that of the payer.

17. The method of claim 16 in which the authorization parameter is associated with
20 payment authorization, listing due bills, listing all bills, listing billers, listing payment methods, listing failed bills, adding a payment method and adding a biller.

18. The method of any one of claims 3, 4 or 7 in which indicating data relates to a request, that a bill be printed locally.

25

19. The method of any one of claims 1, 4 or 5 in which:

a portion of the coded data is superimposed with a visual graphic, the visual graphic relating to the parameter associated with the portion.

20. The method of any one of claims 1, 4 or 5 in which the form is a bill.
21. The method of claim 1, 4 or 5 which includes supplying the form as part of a
5 product or its packaging.
22. The method of claim 21 in which the product is a printed periodical.
23. The method of claim 22 which includes printing the coded data to be
10 substantially invisible in the visible spectrum.
24. The method of any one of claim 1, 4 or 5 which includes retaining a retrievable
record of each form generated, the form being retrievable using its identity as contained
in its coded data.
- 15 25. The method of any one of claims 1, 4 or 5 which includes distribution a
plurality of the forms using conventional mail.
26. The method of claim 1 or 4 in which the sensing device contains an
20 identification means which imparts a unique identity to the sensing device and identifies
it as belonging to a particular potential purchaser and in which the method includes
monitoring, in the computer system, said identity.
27. The method of any one of claims 1, 4 or 5 which includes providing all required
25 information relating to the bill paying transaction in the form to eliminate the need for a
separate display device.

28. The method of any one of claims 1, 4 or 5 in which the form is printed on multiple pages and in which the method includes binding the pages.

29. A system for enabling online bill paying, the system including:

5 a form containing information relating to a bill paying transaction, the form including coded data indicative of an identity of the form and of at least one reference point of the form; and

10 a computer system for receiving indicating data from a sensing device for identifying at least one parameter relating to the bill paying transaction, the indicating data being indicative of the identity of the form and a position of the sensing device relative to the form, the sensing device sensing the indicating data using at least some of the coded data.

15 30. The system of claim 29 in which said at least one parameter relating to the bill paying transaction is associated with at least one zone of the form.

31. The system of claim 29 which includes the sensing device, the sensing device sensing its movement relative to the form using at least some of the coded data.

20 32. A system for enabling online bill paying, the system including

a form containing information relating to a bill paying transaction, the form including coded data indicative of at least one parameter of the bill paying transaction; and

25 a computer system for receiving data from a sensing device regarding said at least one parameter and regarding movement of the sensing device relative to the form, and for interpreting said movement of the sensing device as it relates to said at least one parameter, the sensing device, when moved relative to the form, sensing the data regarding said at least one parameter using at least some of the coded data and generating the data regarding its own movement relative to the form.

33. A system for enabling online bill paying, the system including:

a form including coded data indicative of an identity of the form; and

5 a computer system for receiving from a sensing device data regarding an identity of the potential purchaser and the identity of the form, and for identifying, from said received data, a bill paying transaction, the sensing device containing the data regarding the identity of the potential purchaser and sensing the data regarding the identity of the form using at least some of the coded data.

10 34. The system of claim 33 in which the coded data is also indicative of at least one parameter of the bill paying transaction, the computer system receiving indicating data from the sensing device regarding said at least one parameter of the bill paying transaction, and the sensing device sensing the indicating data using at least some of the coded data.

15

35. The system of claim 33 which includes the sensing device, the sensing device sensing its movement relative to the form.

20 36. The system of any one of claims 29, 32 or 34 in which said at least one parameter of the bill paying transaction is selected from the group comprising an action parameter of the bill paying transaction, an option parameter of the bill paying transaction, a text parameter of the bill paying transaction, or an authorization parameter of the bill paying transaction.

25 37. The system of claim 36 in which the action parameter of the bill paying transaction is selected from the group comprising:

requesting information relating to a bill, initiating bill payment, resetting the form, electronically forwarding a bill, paying a bill, printing a bill, canceling a bill payment, listing due bills, listing or adding billers, listing, adding or removing payment

38. The system of claim 36 in which the option parameter is associated with at least one of:

39. The system of claim 36 in which the text parameter is associated with at least one of:

10 payment limit, account name, account number, cardholder name, card expiry date, autopay limit, payment amount and payment date.

41. The system of claim 36 in which the form is a bill.

43. The system of claim 31 or 32 in which the sensing device contains an identification means which imparts a unique identity to the sensing device and identifies it as belonging to a particular potential purchaser.

44. The system of any one of claims 29, 32 or 33 in which the form is a surface of a surface-defining means and in which the system includes a printer for printing the form prior to distribution to a user.

45. The system of claim 44 in which the printer prints the coded data at the same time as printing the form on the surface-defining means.

5 46. The system of any one of claims 29, 32 or 33 in which the coded data is substantially invisible in the visible spectrum.

47. The system of claim 29 or 33 which includes a database for keeping a retrievable record of each form generated, each form being retrievable by using its identity as included in its coded data.

48. The system of claim 44 in which, to cater for a form printed on multiple pages, the printer includes a binding means for binding the pages.

15 49. A method of making an online bill payment, comprising the steps of:

obtaining from a network source, a bill paying form surface; the surface having coded data printed on it, the coded data indicative of an identity of the form; the coded data being readable by a sensing device;

providing to a networked computer system, information from the sensing
20 device, the information based on at least some of the coded data; and

make a payment transaction associated with bill or bills covered by the bill paying form.

50. The method of claim 49, wherein:

25 the sensing device generates the information indicative of its time-varying
location by sensing its time-varying acceleration via at least one accelerometer.

the networked computer comprises a local printer and the bill paying form surface is printed by the local printer.

the sensing device captures data, further comprising time-varying location data forming a series of strokes from which digital ink is derived; the digital ink derived from a signature zone being used to recognize or authenticate a user.

the sensing device comprises a wireless pen interface and a transmission of digital ink from the wireless pen interface further comprises bio-metric information derived from bio-metric data captured by the pen interface.

the biometric data captured by the pen interface is at least some data from the group including: pen tilt, pen force and fingerprint data.

55. The method of claim 49, wherein:

at least some coded data is composed of an array of macrodots which are arranged to depict a target area and data areas.

57. The method of claim 56, wherein:

the target area comprises orientation indicating corners.

- | General Information | | Study Design | | Study Population | | Intervention | | Outcome Measures | | Statistical Analysis | |
|---------------------|---|--------------|-----------------------------|------------------|----------------------|--------------------|----------|-------------------|-------|----------------------|--------|
| Variable | Value | Variable | Value | Variable | Value | Variable | Value | Variable | Value | Variable | Value |
| Study ID | 123456 | Study Type | Randomized Controlled Trial | Sample Size | 1000 | Intervention Group | 500 | Primary Outcome | 15% | Statistical Test | t-test |
| Author | John Doe | Year | 2023 | Age Range | 18-65 | Control Group | 500 | Secondary Outcome | 10% | Significance Level | 0.05 |
| Title | Effect of Intervention X on Outcome Y | Location | USA | Gender | 50% Male, 50% Female | Duration | 12 weeks | Adverse Events | 5% | Power | 80% |
| Abstract | <p>Background: Intervention X is hypothesized to improve Outcome Y. This study aimed to evaluate the efficacy and safety of Intervention X compared to a control group.</p> <p>Methods: A randomized controlled trial was conducted with 1000 participants. The intervention group received Intervention X, while the control group received a placebo. The primary outcome was the percentage of participants achieving Outcome Y. Secondary outcomes included adverse events and quality of life.</p> <p>Results: The intervention group showed a significantly higher percentage of participants achieving Outcome Y (15%) compared to the control group (10%). Adverse events were reported in 5% of the intervention group and 3% of the control group. Quality of life scores were significantly higher in the intervention group.</p> <p>Conclusion: Intervention X is effective in improving Outcome Y and is safe. Further studies are needed to confirm these findings.</p> | | | | | | | | | | |
| Introduction | <p>Outcome Y is a common condition affecting millions of people worldwide. Current treatments for Outcome Y are limited and often have side effects. Intervention X is a novel treatment that has shown promising results in preliminary studies. This study was designed to evaluate the efficacy and safety of Intervention X in a large, randomized controlled trial.</p> | | | | | | | | | | |
| Methods | <p>The study was a randomized controlled trial with two groups: the intervention group and the control group. The intervention group received Intervention X, while the control group received a placebo. The study was conducted over a period of 12 weeks. The primary outcome was the percentage of participants achieving Outcome Y. Secondary outcomes included adverse events and quality of life.</p> | | | | | | | | | | |
| Results | <p>The primary outcome was the percentage of participants achieving Outcome Y. The intervention group showed a significantly higher percentage of participants achieving Outcome Y (15%) compared to the control group (10%). The difference was statistically significant (p < 0.05). Adverse events were reported in 5% of the intervention group and 3% of the control group. Quality of life scores were significantly higher in the intervention group (p < 0.05).</p> | | | | | | | | | | |
| Conclusion | <p>Intervention X is effective in improving Outcome Y and is safe. Further studies are needed to confirm these findings.</p> | | | | | | | | | | |